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9. (New) The chitosan containing material derived from fungal biomass of claim 7, wherein a 1 percent by weight solution of the chitosan containing material in 1 percent aqueous acetic acid has a viscosity of less than 15 centipoise at 25°C.

10. (New) The chitosan containing material of claim 7, wherein the chitosan containing material has greater than 90 percent deacetylation of the N-acetyl groups in the chitin.

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11. (New) The chitosan containing material of claim 7, wherein the chitosan containing material has greater than 93 percent deacetylation of the N-acetyl groups in the chitin.

12. (New) The chitosan containing material of claim 7, wherein the chitosan containing material has greater than 95 percent deacetylation of the N-acetyl groups in the chitin.

13. (New) The chitosan containing material of claim 7, wherein the chitosan containing material has ash levels below 0.50 percent.

14. (New) The chitosan containing material of claim 7, wherein a 1 percent by weight solution of the chitosan containing material in 1 percent aqueous acetic acid has a turbidity of less than 40 NTU.

15. (New) The chitosan containing material of claim 7, wherein the chitosan is derived from substantially uniform microbial fungal sources.

16. (New) The chitosan containing material of claim 7, wherein the chitosan is derived from *Candida Guillermondii, Aspergillus niger, Aspergillus terreus,* and combinations thereof.

17. (New) A chitosan containing material of claim 7 wherein less than 15 percent of the amine groups are acetylated and said material is obtained from microbial biomass.

18. (New) A method of obtaining chitosan from microbial biomass, the method comprising the steps of:

(a) providing chitin-containing biomass;

(b) reacting the chitin-containing biomass in a caustic solution of greater than 25 percent alkali at a reaction temperature greater than 95°C for a reaction period of at least 10 hours to convert the chitin in the biomass to chitosan; and

(c) separating the chitosan from the caustic solution.

19. (New) The method of claim 18, wherein the caustic solution is from 30 to 40 percent alkali.

20. (New) The method of claim 18, wherein the reaction temperature is from 105° to 125°C.

21. (New) The method of claim 18, wherein the reaction temperature is less than 125°C.

22. (New) The method of claim 18, wherein the reaction period is from 10 to 20 hours.

23. (New) The method of claim 18, wherein a 1 percent solution of the separated chitosan in 1 percent acetic acid has a viscosity of less 25 centipoise at 25°C.

24. (New) The method of claim 18, wherein the chitin is at least 85 percent deacetylated.

25. (New) The method of claim 18, wherein the chitin is at least 90 percent deacetylated.

26. (New) The method of claim 18, wherein the chitin is at least 95 percent deacetylated.

27. (New) The method of claim 18, wherein separating the chitosan comprises washing the deacetylated biomass with a caustic solution; recovery of the chitosan; precipitating the chitosan, and drying the precipitated chitosan.

28. (New) The method according to claim 18, wherein the microbial biomass is selected from the group consisting of *Candida Guillermondii, Aspergillus niger, Aspergillus terreus,* and combinations thereof.

29. (New) The method according to claim 18, further comprising heating the microbial biomass at a caustic concentration off less than 25 percent alkali prior to reacting it at a caustic solution of greater than 25 percent alkali.

30. (New) The method according to claim 29, wherein the caustic concentration is less than 10 percent alkali.

31. (New) The method according to claim 29, wherein heating the microbial biomass is at caustic concentration is from 2 to 5 percent alkali for less than 4 hours at a temperature of 100° to 120°C.